

H.A

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/803,298	KLEINE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anjan K. Deb	2858	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/24/2005.
2. ☒ The allowed claim(s) is/are 1-26.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☒ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____  |

*Anjan K. Deb*

Anjan K Deb  
Primary Examiner  
Art Unit: 2858

### **DETAILED ACTION**

1. This office action is in response to amendment filed 10/24/2005.

#### ***Allowable Subject Matter***

2. Claims 1-26 are allowed.

#### ***Reasons for Allowance***

3. The following is an examiner's statement of reasons for allowance:

The claims in the application are deemed to be directed to a nonobvious improvement over the invention patented in US 5,223,830 A. While US 5,223,830 A disclosed measuring distance comprising two input signals (U1, U2) from sensor outputs are applied to first and second amplifier circuits it did not expressly disclose amplifiers comprise switched capacitors (SC) so as to form the claimed SC network for generating a measurement output signal that is dependent on a temperature influence (Fig. 1). US Patent # 5,281,860 A disclosed method and apparatus for an improved multiple channel sensor interface wherein at least two input signals are applied to SC network comprising first 9 and second 11 switched capacitor amplifiers connected to a third 15 switched capacitor amplifier for generating a measurement signal Vout (Fig. 1). US Patent # 5,281,860 A did not disclose measuring distance wherein the input signals are applied to the inputs of a measuring coil. In the examiner's opinion, it would not have been obvious to a person of ordinary skill in the art to combine the sensor interface circuit

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comprising switched capacitor network disclosed in US Patent # 5,281,860 A with the distance measuring circuit disclosed in US 5,223,830 A to arrive at the claimed invention.

### *Conclusion*

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Weigand (US 4,731,591) disclose sensor for measuring distance comprising two input signals (L+, L-) applied to coil 14 (inductive proximity switch) and switched capacitor 16 (Figure).

Kawagoe (US 5,712,563) disclose displacement sensor comprising power source, detection coil 2 producing two output signals (Vs1, Vs2) applied to deviation measurement circuit (Fig. 1,2, 13).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Anjan K. Deb whose telephone number is 571-272-2228. If

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attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached at 571-272-2399.

A handwritten signature in black ink, appearing to read 'Anjan K. Deb', with a stylized flourish at the end.

**Anjan K. Deb**

Primary Patent Examiner

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12/29/05

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